

Anaerobic Digester Provides 8% of Energy Needs at Nestlé's Fawdon Factory

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Sweet waste turned into biogas brings a host of environmental and practical benefits as Nestlé seeks to reduce carbon footprint



Photo by Kieran Dodds

The anaerobic digestion plant at Nestle's Fawdon factory uses food waste to produce gas, which generates electricity to supply the production line.



Management at Nestlé UK & Ireland's Tyneside factory have spoken of the wealth of benefits gained by the installation of an anaerobic digester that turns waste from sweets into energy.

Working to reduce the company's carbon footprint and environmental impact, it turned to the Berkshire-based renewables firm Clearfleau to build a bespoke system for its Fawdon plant.

Exactly a year on, the technology is converting four tonnes of solid waste and 200,000 litres of liquid waste into renewable energy and clean water each day.

The biogas produced fuels a combined heat and power engine, creating 200kW of electricity - the equivalent of about 8% of the site's energy needs.

The system has also significantly improved the quality of the water discharged, with the equivalent of 41 Olympic-size swimming pools of clean water having been released from the site in the past year.

Greenhouse gas emissions have also improved, falling by approximately 10 percent.

Andrew Griffiths, sustainability manager at Nestlé Fawdon, said: "We're proud to announce that one year on from launch, we've achieved our target of zero waste to landfill at our Fawdon factory, thanks to the installation of a new anaerobic digester.

"The system allows us to convert a large amount of waste that would otherwise enter sewage, used as feed stock or landfill systems and generate methane and other greenhouse gas emissions."

The move forms part of a company-wide drive by Nestlé UK & Ireland - a subsidiary of Nestlé SA - to keep environmental impact to a minimum.

It was planned that by 2015, 10% of its factories would be sending no waste for disposal at all.

The business, however, achieved this target two years early in 2013 and now Nestlé is guaranteeing that by 2020, none of its 150 factories will send waste to landfill.

Home to famous brands such as Rolo, Toffee Crisp and Caramac, the factory in Fawdon first turns sweet waste into a 'chocolate soup', which is then fed into the digester, an airtight tank, where bacteria decomposes the material and converts it into by-products such as the renewable energy, biogas

Richard Gueterbock, a director at Clearfleau, said: "Nestlé's on-site digestion plant is a great example of how food companies can make better use of production residues to reduce their carbon footprint.

"Nestlé is leading the food industry on generation of renewable energy from such materials.

"It is very encouraging that Nestlé chose to work with an emerging British company to build its plant. Clearfleau is delighted to have been involved in this groundbreaking project."

Nestlé UK & Ireland employs 8,000 people across 20 sites and produces some of Britain's best known brands

It is also one of the biggest exporters in the food industry, selling more than £350m worth of products every year to over 70 countries around the world.

